

### **REMARKS**

This amendment is responsive to the Office Action of September 15, 2003.

New claims 29-33 are added. Claims 3, 4, 11, 12, 19 and 20 were amended to better characterize aspects of the invention.

The Office Action Summary indicates that the drawings filed with the application on August 14, 2001 are objected to. No Form PTO-948 was included with the Office Action, nor was any reason given for this objection. Formal drawings were filed on September 21, 2001 and a copy of the drawings and postcard evidencing submission to the PTO is attached hereto. It is respectfully submitted that the formal drawings are acceptable, and withdrawal of the objection is respectfully requested.

The Information Disclosure Statement filed on December 31, 2002 has been acknowledged. Applicant respectfully requests consideration of the information in the Information Disclosures filed on October 3, 2001, July 31, 2002, September 19, 2002, November 19, 2002, April 25, 2003, July 3, 2003, and October 9, 2003.

Beginning on page 2 of the Office Action, the Examiner rejected claims 1-28 under 35 U.S.C. § 102(a) as being anticipated by *Nulman* (U.S. Patent No. 6,303,395 B1). This rejection is respectfully traversed on the ground that the independent claims of the application are not anticipated by this reference, nor are they taught or suggested by this reference alone and/or in combination with other references of record.

With regard to the present application, Applicants recognized that “in order to improve manufacturing or test theories, it is often desirable to perform experiments by changing some small portion of the base manufacturing process” (Specification p. 1). At least one aspect of the

invention addresses the problem of, *inter alia*, “automating experiments within an automated (e.g., production or mock-production manufacturing) environment without the need to disassociate the test subject (e.g., the semi-conductor chip or chips) from that environment” (specification p. 2).

Within the aforementioned realm, independent claim 1 recites “(A) receiving an experiment order ... including at least some deviation from a base process capable of operating in an automated environment; ...” It is respectfully submitted that *Nulman* does not teach this limitation. Instead, and per the portion of the reference cited by the Examiner, *Nulman* discloses that the “MES environment [] acquires the results of the SPC [statistical process control] analysis ... The MES environment then determines whether the process of manufacturing environment 110 is within or outside the SPC control limits. A decision making function in [the] MES environment [] can then be invoked to decide whether or not to initiate intervention in [the] manufacturing environment []. Such intervention can include aborting the run, adjusting parameters such as chamber pressure, scheduling additional wafers for processing or scheduling maintenance activities.” (Col. 7, lines 12-22) Applicants submit that intervention (including the adjustment of parameters) due to a process being outside of control limits is not the same as, and in no way teaches, an experiment order (which, according to p.2 of the specification, relates to “a request to initiate an experiment”) or receipt thereof, as is evident by at least the differences in purpose of the claimed invention and *Nulman*.

For at least these reasons, it is respectfully submitted that independent claim 1 (as well as independent claims 9, 17, 25 – 28 and 32, all of which recite the aforementioned “experiment order”) is patentably distinguished over the prior art.

With respect to the rejected and new dependent claims, Applicant respectfully submits that these claims are allowable by virtue of at least their dependency from independent claims 1, 9, 17 or 32.

In view of the foregoing amendments and remarks, Applicant respectfully requests the reconsideration and reexamination of this application and the timely allowance of the pending claims.

To the extent any extension of time under 37 C.F.R. § 1.136 is required to obtain entry of this amendment, such extension is hereby requested. If there are any fees due under 37 C.F.R. §§1.16 or 1.17 which are not enclosed, including any fees required for an extension of time, please charge those fees to our Deposit Account No. 08-0219.

Respectfully submitted,

HALE AND DORR LLP



Scott M. Alter  
Registration No. 32,879

Dated: March 3, 2004  
Reston Town Center  
11951 Freedom Drive  
Reston, VA 20190  
Tel.: 703-654-7021  
Fax: 703-654-7100